

IN THE CLAIMS:

Please cancel claims 5-7 and 12 without prejudice to or disclaimer of the subject matter recited therein.

Please amend claims 1, 9, 13 and 14, and add new claims 16-20 as follows:

LISTING OF CURRENT CLAIMS

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Claim 1. (Currently Amended) A cover-locking mechanism for an optical storage carrier player, the cover-locking mechanism comprising:

a switch for receiving an actuating signal from a user;

5 a cover disposed on the carrier player and selectively actuated to enter an open state for placing or removing a carrier;

a driving unit disposed on the carrier player for supporting and rotating a optical storage carrier within the carrier player;

a locking means disposed on the carrier player for selectively engaged with or separated from the cover, and

10 a controller coupled to the switch and the driving unit for detecting a rotational speed of the driving unit, the controller comprising:

a rotation speed detection module for detecting the rotation speed of the driving unit;

15 a comparative module coupled to the detection module for comparing the rotational speed with a pre-determined speed;

wherein the locking means is actuated by the controller to be separated from the cover to make the cover enter the open state when the actuating signal is presented at the switch and the rotation speed is lower than the pre-determined speed: speed;

20 wherein the cover is actuated to enter a locked up state that is capable of preventing the cover from being opened when the rotation speed of the carrier is higher than the predetermined speed;

wherein the controller further comprises a signal generation module, capable of generating a speed-reduction signal transmitting to the driving unit for reducing

- 25 its rotation speed as the rotation speed is higher than a predetermined speed and the actuating signal is presented at the switch; and
wherein the signal generation module, capable of generating an output signal to make the cover enter the open state as the rotation speed is lower than a predetermined speed and the actuating signal is presented at the switch.

Claim 2. (Original) The cover-locking mechanism of claim 1, further comprising a cover-engaging unit capable of selectively driving the locking means to release the cover to the open state.

Claim 3. (Original) The cover-locking mechanism of claim 2, wherein the cover-engaging unit comprises a solenoid valve and the locking means is a slidable protruding block, the protruding block is engaged with the cover when the solenoid valve is power-off, and the protruding block is separated from the cover when the solenoid valve is power-on.

Claim 4. (Original) The cover-locking mechanism of claim 1, wherein the locking means is an electromagnet, the electromagnet is engaged with the cover when the electromagnet is power-on, and the electromagnet is separated from the cover when the electromagnet is power-off.

Claims 5-7. (Canceled)

Claim 8. (Original) The cover-locking mechanism of claim 1, wherein the controller is remotely controlled.

- 5 Claim 9. (Currently Amended) A method for controlling an open state and a locked state of a cover installed on an optical storage carrier player, the carrier player having a driving unit for supporting and rotating an optical storage carrier, a locking means for selectively engaged with or separated from the cover, and a controller coupled to the driving unit and the locking means, the method comprising following steps of:

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10 (a) presenting an actuating signal to actuate the controller to detect a rotation speed of the driving unit and ~~compar~~ compare the rotation speed with a predetermined speed wherein the rotation speed of the driving unit is detected by transforming a sine wave signal generated by the driving unit into a series of pulse signal with intervals,

(b) generating a first control signal by the controller transmitting to the locking means to make the locking means engaged with the cover when the detected rotation speed is higher than the predetermined speed; and

15 (c) generating a second control signal the controller transmitting to the locking means to make the locking means separated from the cover when the detected rotation speed is lower than the predetermined speed to make the cover to enter the open state.

Claim 10. (Original) The method of claim 9, wherein the controller generates a speed-reduction signal transmitting to the driving unit to reduce the rotation speed when the detected rotation speed is higher than the predetermined speed and the actuating signal is presented.

Claim 11. (Original) The method of claim 9, wherein the actuating signal of step (a) is remotely presented through a switch.

Claim 12. (Canceled)

Claim 13. (Currently Amended) The method of claim 42 9, wherein the pulse is corresponding to the wave crest of the sine wave.

Claim 14. (Currently Amended) The method of claim 42 9, wherein the pulse is corresponding to the wave valley of the sine wave.

Claim 15. (Original) The method of claim 10, wherein the speed-reduction signal is a series of pulse signal with a longer interval corresponding to a reduced rotation speed lower than the predetermined speed.

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Claim 16. (New) A cover-locking mechanism for an optical storage carrier player, the cover-locking mechanism comprising:

a switch receiving an actuating signal from a user;

5 a cover disposed on the carrier player and selectively actuated to enter an open state for placing or removing a carrier;

a driving unit disposed on the carrier player transforming a rotation speed signal from a sine wave signal into a pulse signal with a plurality of intervals; and

a controller coupled to the switch and the driving unit, and receiving the pulse signal, wherein the controller generates an open signal to actuate the cover to enter
10 the open state when intervals of the pulse signal are larger than a predetermined interval.

Claim 17. (New) The cover-locking mechanism of claim 16, wherein the controller comprises:

a rotation speed detection module receiving the pulse signal and detecting the rotation speed of the driving unit ;

5 a comparative module coupled to the rotation speed detection module and comparing the intervals of the pulse signal with a pre-determined interval; and

a signal generation module generating a speed-reduction signal transmitted to the driving unit reducing its rotation speed when the intervals of the pulse signal are larger than a predetermined interval and generating an output signal to make the
10 cover enter the open state.

Claim 18. (New) The cover-locking mechanism of claim 16, further comprising:

a locking device disposed on the carrier player selectively engaged with or separated from the cover; and,

5 a cover-engaging unit selectively driving the locking means to release the cover to the open state.

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Claim 19. (New) The cover-locking mechanism of claim 18, wherein the cover-engaging unit comprises a solenoid valve and the locking device is a slidable protruding block, the protruding block is engaged with the cover when the solenoid valve is power-off, and the protruding block is separated from the cover when the solenoid valve is power-on.

Claim 20. (New) The cover-locking mechanism of claim 16, wherein the locking device is an electromagnet, the electromagnet is engaged with the cover when the electromagnet is power-on, and the electromagnet is separated from the cover when the electromagnet is power-off.
